# CalPERS Rate Stabilization Study

## Smoothing Vs Funding

- Smoothing and funded status work against one another – the more you smooth, the slower the fund moves back toward 100% funded status.
- In fact, some smoothing methods are so risky that they produce a chance of fund insolvency.

## Objectives

- So, our objective is to seek the smoothing method that "best" simultaneously:
  - Minimizes the impact on the funded status of the plans.
  - Minimizes the volatility in the employer's contribution.
  - Minimizes the average future employer contribution.

## Additional Objective

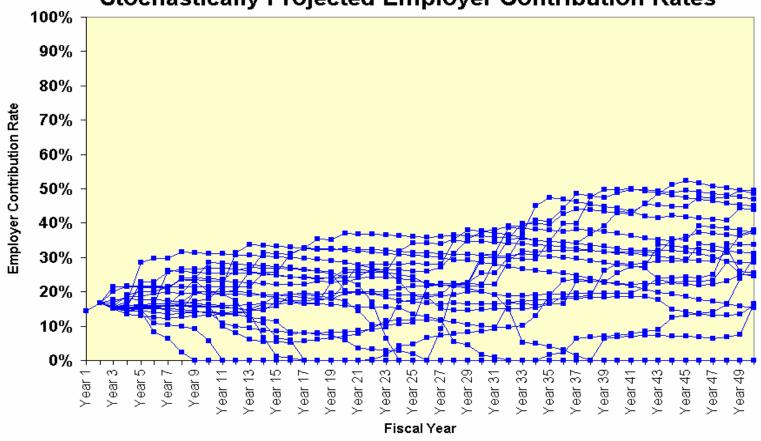
An additional objective is to find a method that accomplishes these three objectives and produces employer rates that comply with the generally accepted accounting standards as provided by Governmental Accounting Standards Board Statement No.27 (GASB 27).

## Methodology Used

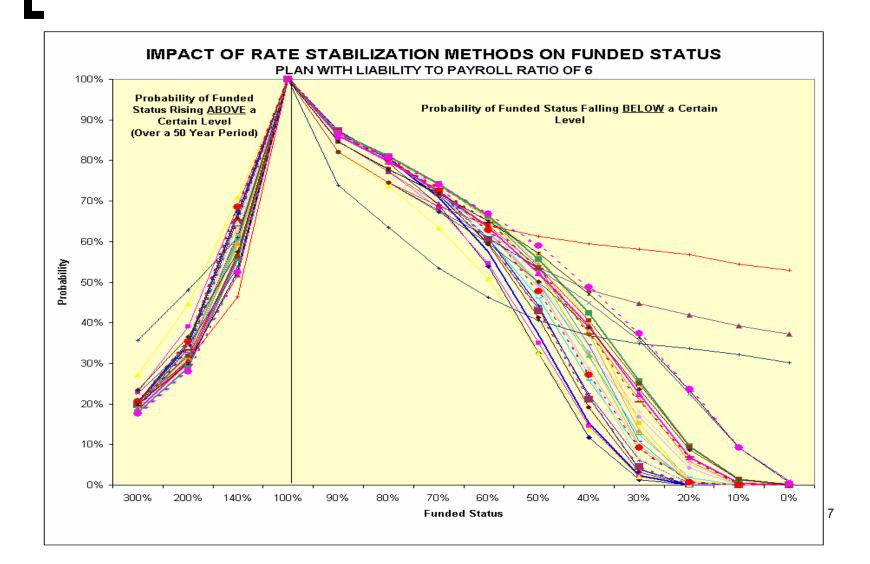
- We generated 1500 sets of 50 year investment returns based on our asset allocation and computed employer rates and funded status over the each of the 1500 fifty year projections based on over 30 different smoothing methods.
- We eliminated all methods that produced any scenario in which the fund became insolvent during the 50 year projection period.
- We also eliminated all methods that did not reduce employer rate volatility by at least 50%.
- In the graphs to follow, dotted curves are methods that do not produce GASB 27 compliant employer rates.

# 1500 Stochastic 50 year valuations

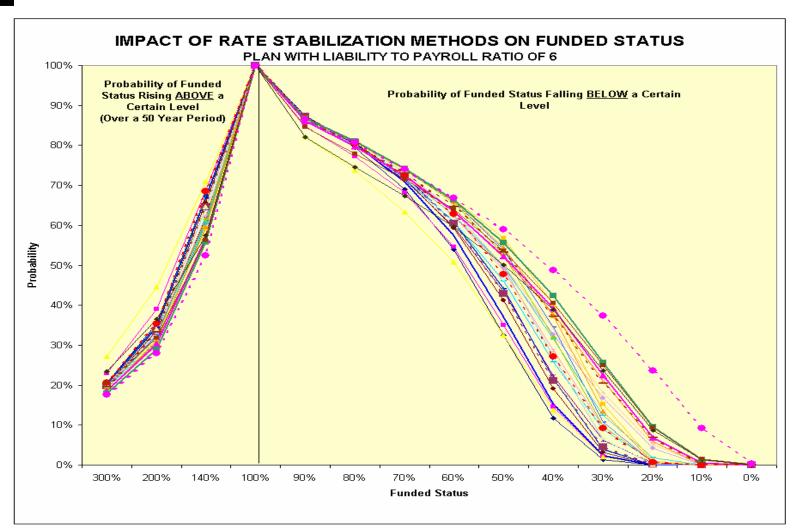
Sample of 25 of the 1500
Stochastically Projected Employer Contribution Rates



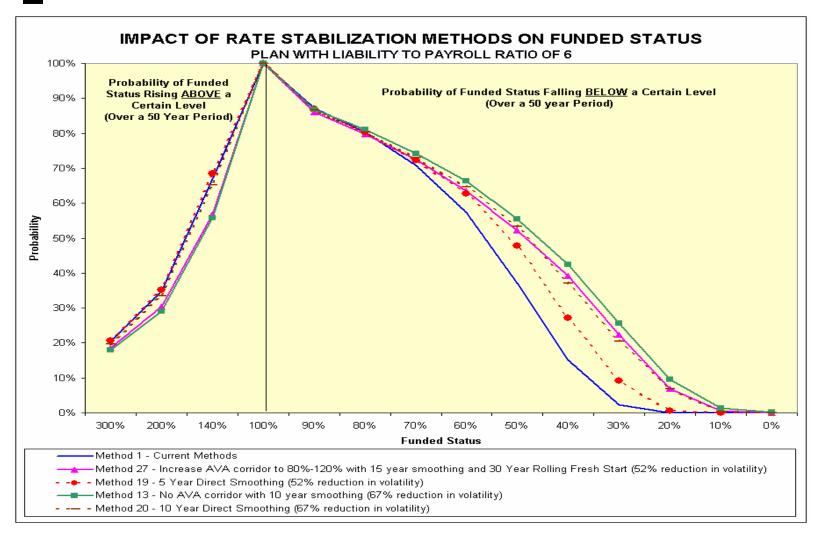
# Impact on Funded Status All Methods Studied



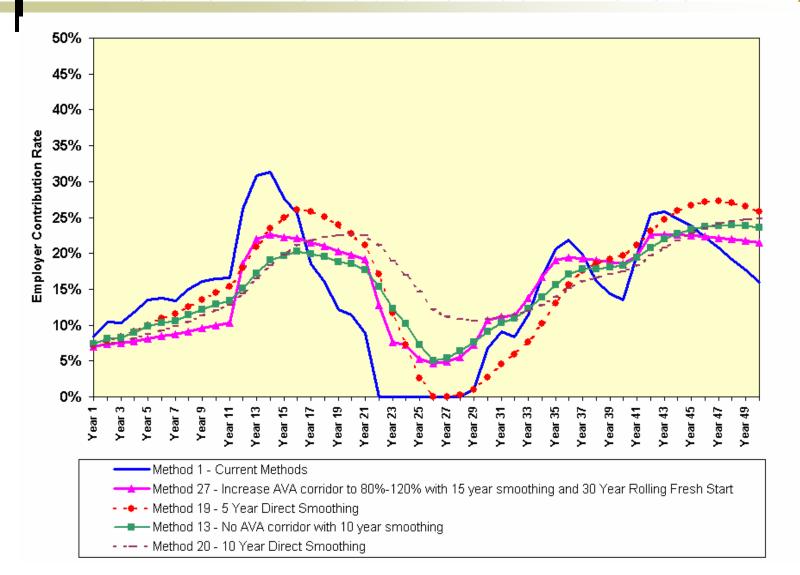
# Impact on Funded Status After Eliminating All Methods Producing Any Scenario showing Fund Insolvency



# Impact on Funded Status After Eliminating Methods That Reduced Employer Rate Volatility by Less Than Half



# Sample Stochastic Projection Current Method and Four Finalists



## Impact on Employer Rates

#### **Current Method and Four Finalists**

Method	Standard Deviation of Annual Change in Rate	Reduction in Volatility	Impact on Average Employer Contribution Rate	Produces Rates that Comply with GASB 27
Current Methods	3.3%	N/A	N/A	Yes
Eliminate the AVA Corridor with 10 Year spread of Asset Gain and Loss	1.1%	67% Reduction	Increase by 0.5%	Yes
5 Year Direct Rate Smoothing	1.6%	52% Reduction	Increase by 0.8%	No
10 Year Direct Rate Smoothing	1.1%	67% Reduction	Increase by 1.6%	No
Increase AVA Corridor to 80%- 120% with 15 Year spread of Asset Gain and Loss over a Rolling 30 year Period	1.6%	52% Reduction	Increase by 0.2%	Yes

## Minimum Contribution Rate

In order to smooth rates even further and as a budgeting tool for employers, staff recommended a Board policy to set a minimum employer contribution rate of the employer normal cost less 30 year amortization of plan surplus.

#### Final Recommendation

- Increase the actuarial value of assets corridor to 80%-120% of market value.
- Use a 15 Year spread of market value asset gains and losses.
- Each year the employer's rate will include a 30 year (rolling) amortization of all previously unamortized gains and losses.
- Set a minimum employer contribution rate of the employer normal cost less 30 year amortization of plan surplus.

#### New Methodology Implementation Guidelines -

#### Non-Pooled Plans, State & Schools

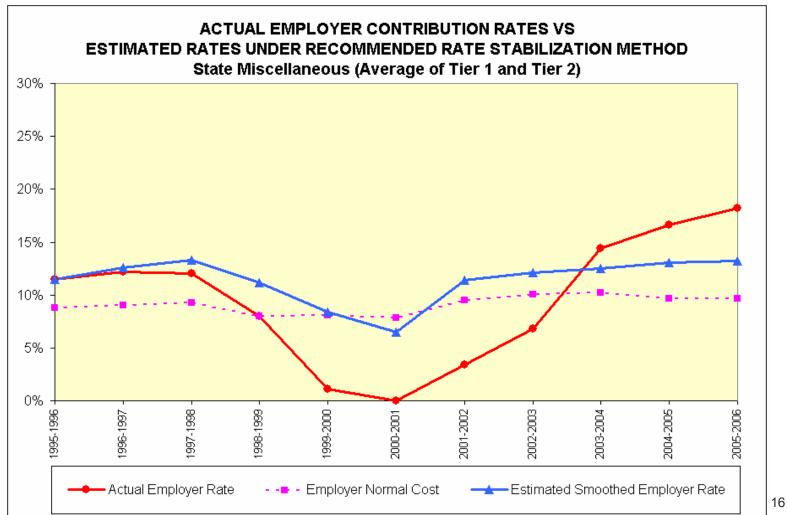
- all existing gain & loss base and payment gain & loss base will be amortized as a rolling 30 year amortization
- all existing benefit improvement, assumption change, method change, initial unfunded liabilities for new agencies will remain unchanged.
- all existing fresh start will be converted to a gain and loss base and be amortized as a rolling 30 year amortization
- To implement the minimum rate, plans with surplus will be subject to a 30 year fresh start (or greater than 30 to avoid negative rates).

#### New Methodology Implementation Guidelines -

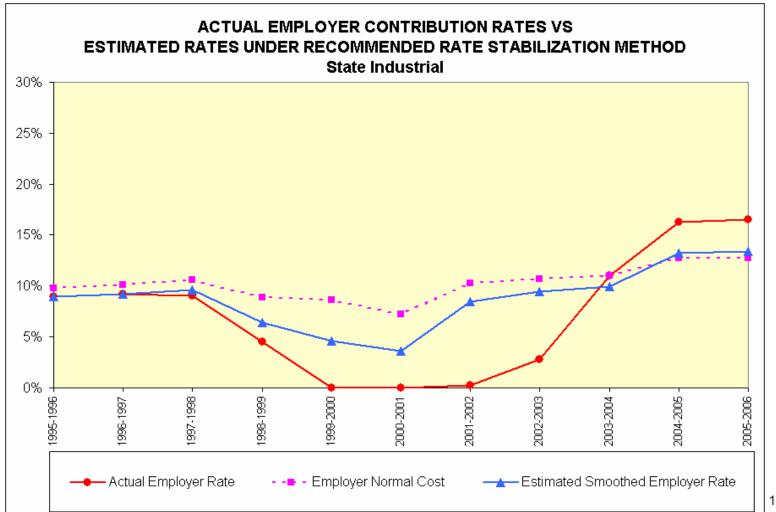
#### Pooled Plans

- The new amortization policies apply at the pool level only.
- Side funds will not be affected by the new amortization method. The side fund current amortization schedule will remain unchanged.
- The minimum contribution rate will apply to the pool's rate only. This means that pooled plans could still have an employer rate of 0% if their side fund is large enough.

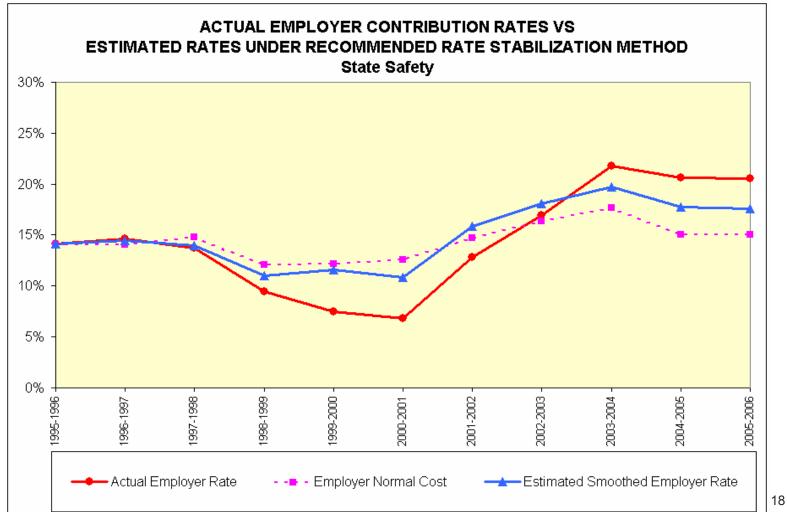
### Estimated Impact of Recommended Method as if Implemented 10 Years Ago



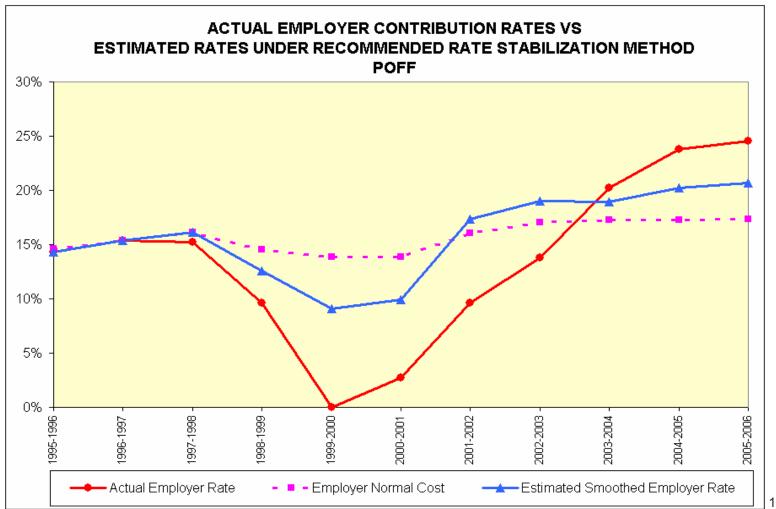
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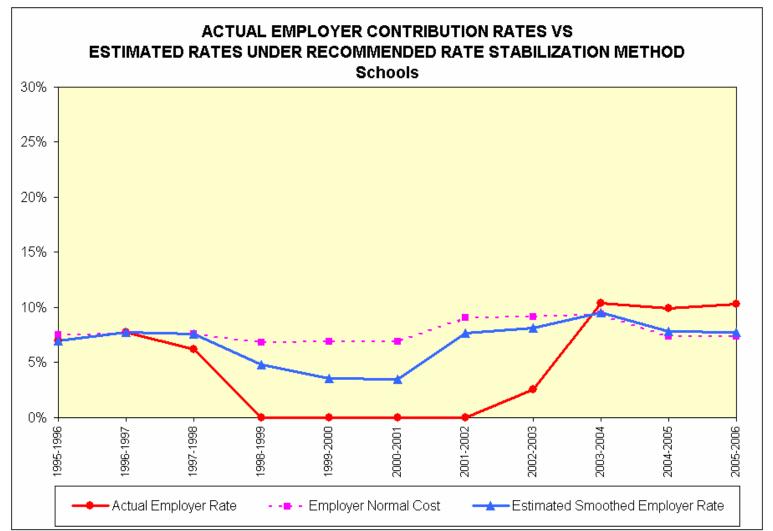
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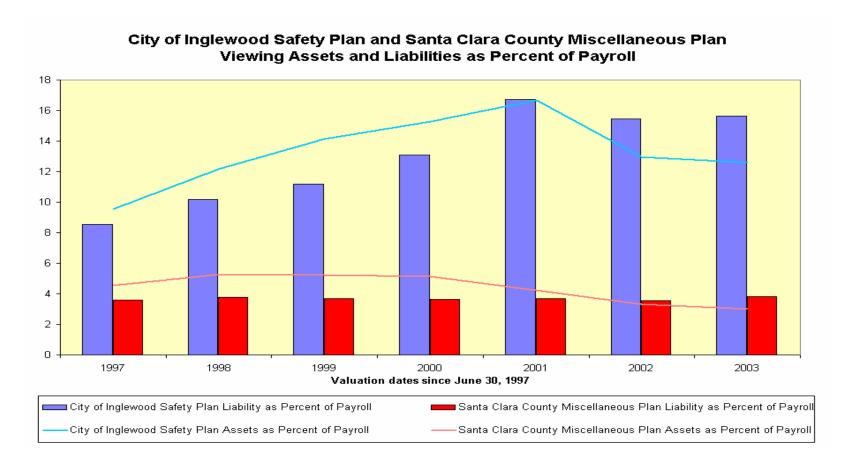
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# Estimated Impact of Recommended Method as if Implemented 10 Years Ago



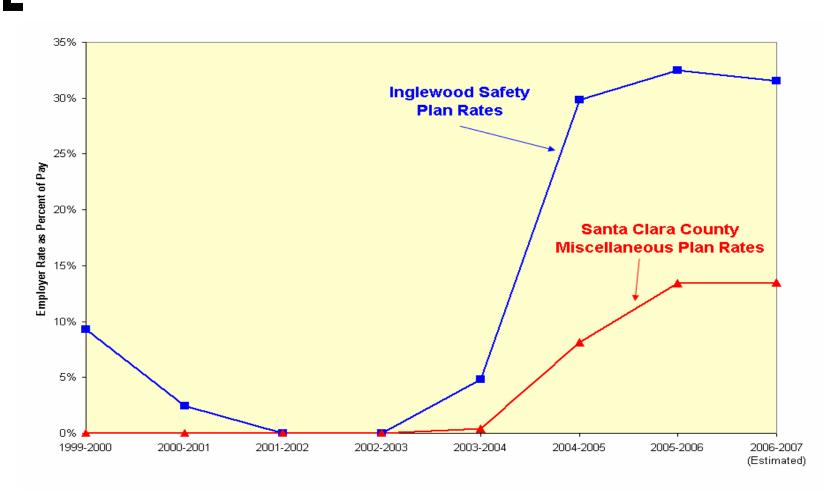
#### City of Inglewood Safety Plan and Santa Clara County Miscellaneous Plan Viewing Assets and Liabilities and a Percent of Payroll



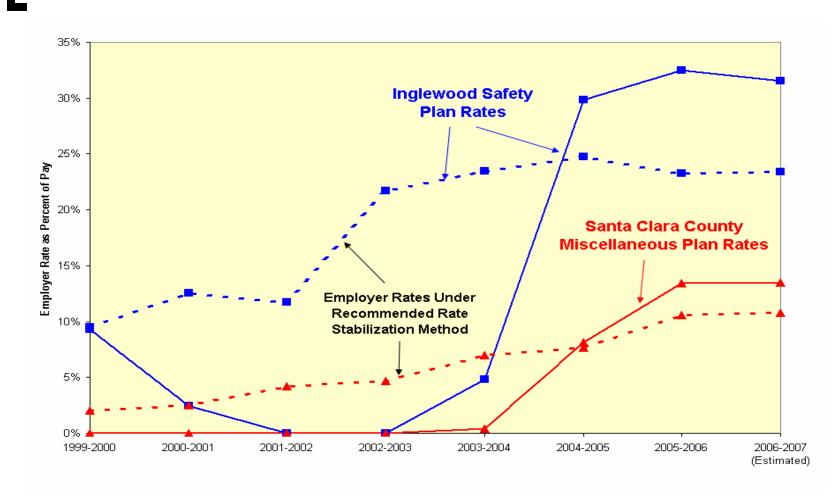
# Public Agency Extremes

- When both of these public agency plans were about 100% funded on June 30, 2001, Inglewood safety had a ratio of assets and liabilities to payroll of about 17 while Santa Clara County Miscellaneous had a ratio of about 4.
- Look at how the investment returns, even with asset smoothing, impacted each plan.

# Impact of Recent Asset Returns on Different CalPERS Plans



# Estimated Impact of Recommended Method as if Implemented 10 Years Ago



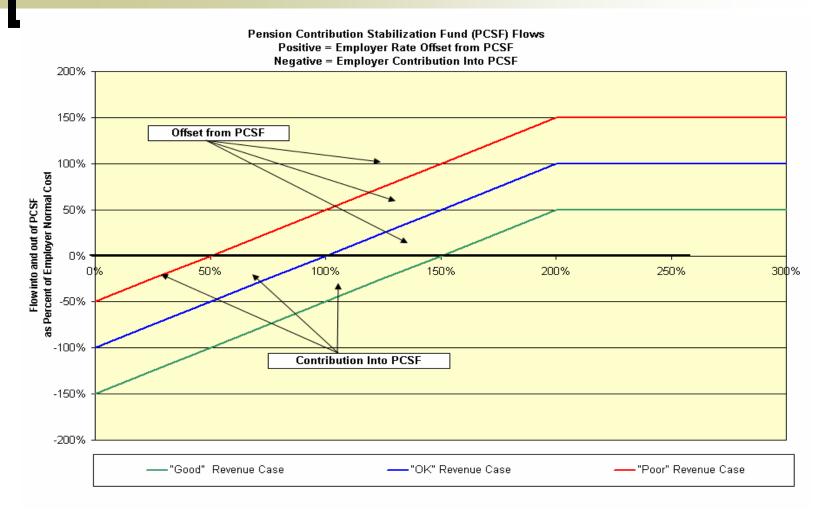
# Pension Stabilization Accounts

- The concepts Contributions in excess of the required contribution into a "rainy day fund" in "good years" and payments into the PERF from the rainy day fund in "bad years".
- We assume that the stabilization account would be irrevocable trusts that could not be used for any purpose other than employer rate stabilization.

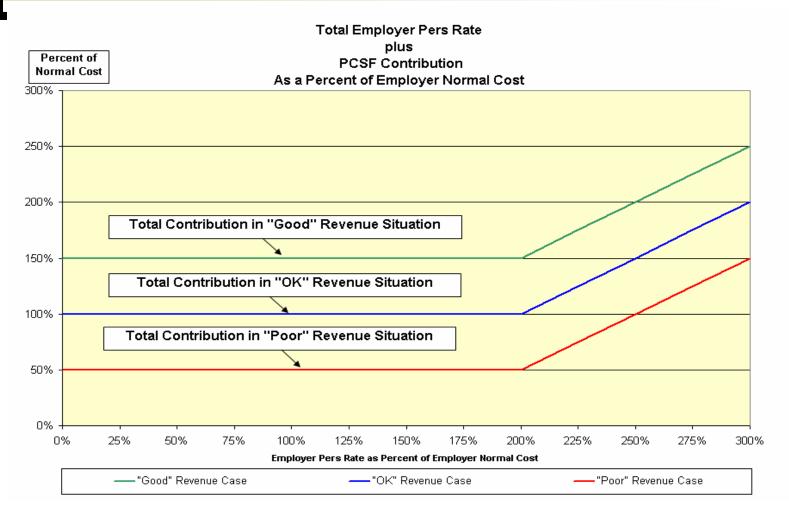
#### Pension Contribution Stabilization Fund

Pension Contribution Stabilization Fund (PCSF) Proposed Money Flow						
		Employer's Revenue				
		Good	ОК	Poor		
Employer's Contribution Rate	High Total Er Rate > 150% of Er Normal Cost	PCSF Offset = Lesser of Total Er Rate – 150% of Er Normal Cost Or 50% of Er Normal Cost	PCSF Offset = Lesser of Total Er Rate – Er Normal Cost Or Er Normal Cost	PCSF Offset = Lesser of Total Er Rate – 50% of Er Normal Cost Or 150% of Er Normal Cost		
	Medium High Total Er Rate < 150% of Er Normal Cost and Total Er Rate > Er Normal Cost	PCSF Contribution = 150% of Er Normal Cost – Total Er Rate (with min of Ee Contribution – Total ER Rate)	PCSF Offset = Total Er Rate – Er Normal Cost	PCSF Offset = Total Er Rate – 50% of Er Normal Cost		
	Medium Low Total Er Rate < Er Normal Cost and Tot Er Rate > 50% of Er Normal Cost	PCSF Contribution = 150% of Er Normal Cost – Total Er Rate (with min of Ee Contribution – Total ER Rate)	PCSF Contribution = Er Normal Cost – Total Er Rate (with min of Ee Contribution – Total ER Rate)	PCSF Offset = Total Er Rate – 50% of Er Normal Cost		
	<u>Low</u> Total Er Rate < 50% of Er Normal Cost	PCSF Contribution = 150% of Er Normal Cost – Total Er Rate (with min of Ee Contribution – Total Er Rate)	PCSF Contribution = Er Normal Cost – Total Er Rate (with min of Ee Contribution – Total ER Rate)	PCSF Contribution = 50% of Er Normal Cost – Total Er Rate (with min of Ee Contribution – Total ER Rate) 26		

#### Pension Contribution Stabilization Fund



#### Pension Contribution Stabilization Fund



# Pension Stabilization Accounts

- Open questions on Stabilization Accounts:
  - Are the stabilization accounts:
    - Part of the Public Employees' Retirement Fund
    - A tax-exempt trust (e.g., a Section 115 trust) separate and apart from the Public Employees' Retirement Fund
    - An account administered by a separate state agency
    - An account created by constitutional amendment
  - Mandatory on all employers or Voluntary employer by employer?

## Pre-funding Health and GASB Statement 45

- A major Board decision Should CalPERS take steps to help employers pre-fund retiree health benefits
  - Definition of Pre-funding
  - Pre-funding Implications
- The Impetus for Pre-funding
  - PEMHCA Article 11 Annuitants' Health Care Coverage Fund
  - GASB Statements 43 and 45
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  - Accounting Requirements
  - Impact on Employers
  - Impact on CalPERS
  - Issues for Employers and CalPERS
- CalPERS' Business Options
- Next Steps
- Questions and Answers

## Pre-funding Retiree Health Benefits

- Pre-funding retiree health benefits is the making of actuarially determined periodic payments to partially or completely fund the unfunded actuarial obligation of the employer.
- Health benefits are currently funded through employer, employee, and retiree contributions on an annual "payas-you-go" basis.

# **Pre-funding Implications**

- Enhances benefit security for retirees (CalPERS Strategic Goal I – Be a champion for retirement and health security).
- Enhances customer service to employers who desire to pre-fund retiree medical benefits
- Reduces projected future employers long-term contributions through the addition of investment income.
- Magnitude of unfunded liability
- Requires substantial expenditure in times of limited funds
- Health industry direction will the future include employer paid health care for retirees?

#### Impetus for Pre-funding Retiree Health Benefits

- California Legislature established the Annuitants' Health Care Coverage Fund (AHCCF) in 1980
- GASB's Role:
  - A non-profit organization that formulates accounting standards for state and local governments
  - GASB standards are not law but are accounting principles that improve the relevance of financial reporting
  - GASB issued Statement 43, for "Plans", and Statement 45, for employers in 2004

# GASB Statements 43 and 45

- No. 43 Reporting for Retirement Benefit Plans Other Than Pensions – Applies to CalPERS
  - CalPERS is not required to report the unfunded liability for retiree health benefits unless we began accepting employers' contributions towards pre-funding their future retirees' health costs
- No. 45 Reporting by Employers for Other Post Employment Benefits (OPEB) – Applies to all governmental employers
  - All government employers must report their unfunded liability or produce financial statements that are not GAAP and receive qualified auditor opinions

# GASB Compliance Timeline

- If CalPERS starts to receive employer contributions to pre-fund retiree health, CalPERS must start reporting the unfunded liability for retiree health under GASB 43 in financial statements for periods beginning after December 15, 2005, i.e. for fiscal year July 1, 2006 through June 30, 2007.
- The commencement date for required disclosures for employers under GASB 45 depends on the size of the employer. Larger employers must start recognizing their liability for financial reporting periods beginning after December 15, 2006, i.e. for fiscal year July 1, 2007 through June 30, 2008.

# GASB 45 Impact on Employers

- Under GASB 45, the State and Public Agency Employers will be required to report their actuarial liability. All but the smallest of employers will require actuarial retiree medical valuations. The smaller employers are allowed to estimate actuarial liabilities.
- There is no requirement that employers pre-fund the benefits. However, these employers may wish to pre-fund the benefits and produce accumulated assets to offset these liabilities.

# GASB 43 Impact on CalPERS

- The impact is based on our decision on whether to accept employers contributions that pre-fund post retirement health benefits.
  - If we do not accept such pre-funding contributions, then
    - There may be slight changes in the reporting of the PEMCHA fund in CalPERS financial statements, but
    - We do not have to perform an actuarial valuation to determine total PEMCHA actuarial liabilities and these actuarial liabilities do not need to be disclosed in CalPERS financial statements.
  - If we do accept such pre-funding contributions, then
    - then CalPERS does have to have an actuarial valuation done to determine total PEMCHA actuarial liabilities and disclose those liabilities in our financial statements.

## Issues Produced by GASB 43 and 45

- Employers' Issues
  - May not have the money to pre-fund
  - Credit rating may be affected if they don't pre-fund; making it difficult to issue bonds, etc.
  - May decide to reduce or eliminate retiree healthcare coverage
- CalPERS Issues
  - Marketability of CalPERS health program

# CalPERS Business Options

- CalPERS must decide how to respond to GASB statements 43 and 45. Our potential response has been summarized into four business options:
  - Provide necessary actuarial data only (to allow employers to have outside actuaries perform the necessary liability calculations) (Minimum Model)
  - Perform post-retirement health benefit actuarial valuations only
  - Accept pre-funding contributions only determined to be an unviable alternative due to GASB 43 that would require CalPERS to essentially adopt option 4 below
  - Perform actuarial valuations, accept pre-funding contributions and administer fund (Full Service Model)

#### Impacts and Issues for the Four Business Options

- Data only
  - Claims experience data
- Valuations only
  - Ability to hire additional actuaries
- Contributions only
  - Not feasible
- Full service
  - Adequate level of participation
  - Funding and sustainability

# **Next Steps**

- Complete a detailed analysis (in progress)
- Conduct meetings with key stakeholders
  - Assess current expectations
- Bring back to the Board (starting in March) for decisions